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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,890	12/21/2000	Adrian Sparks	476-1969	1275
23644	7590	02/08/2005	EXAMINER	
BARNES & THORNBURG P.O. BOX 2786 CHICAGO, IL 60690-2786			TRAN, DZUNG D	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/745,890

Applicant(s)

SPARKS ET AL.

Examiner

Dzung D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/13/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elahmadi et al. US patent no. 6,735,392 in view of Chin et al. US patent no. 5,959,968.

Regarding claims 1, 3 and 4, Elahmadi discloses a network node comprising a plurality of network nodes (figure 4, NODE 72, NODE 74, NODE 76) each network node (for example NODE 72) being arranged to provide optical signals to at least two transmission paths (figure 2, Protection path and working path), the node comprising a data switch or router (figures 4, element 80) having at least two ports (port P and port W) a first port (port W) connected to a working transmission path and a second port (port P) connected to a shared protection path (figure 4, col. 4, lines 37-64) such that in failure free operation both the working transmission path and the shared protection path carry traffic (working transmission path carry a second wavelength and the shared protection path carry the first wavelength see figure 4, col. 8, lines 42-51, col. 9, lines 29-44). Elahmadi differs from claims 1, 3 and 4 of the present invention in that he does not specific disclose a data switch or router 80 is a link aggregation router and in failure free operation both the working transmission path and the shared protection path carry

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traffic simultaneously without duplicated of the traffic on the two routes. Chin discloses a link aggregation router (figure 2, elements 221, 222, 223) having at least two ports (figure 2, elements 1, 2, 3, 4, 5) and the redundant path 226 carry traffic simultaneously without duplicated of the traffic on the two routes (abstract, col. 5, lines 49-65). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to replace the link aggregation router (figure 2, elements 221, 222, 223) taught by Chin with the data switch or router 80 in the system of Elahmadi. One of ordinary skill in the art would have been motivated to do this in order to utilize bandwidth of the system more efficient.

Regarding claim 2, Elahmadi further discloses the ring optical network (figure 4) wherein an optical switching device (for example element 78 in NODE 72) arranged to switch the optical signals from working path to spare paths in either direction around the ring.

Regarding claims 5 and 6, Elahmadi further discloses the shared protection scheme is an optical shared protection ring (figures 4-8, col. 8, line 18) and wherein an optical switching device (for example element 78 in NODE 72) arranged to switch the optical signals from working path to spare paths in either direction around the ring.

3. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elahmadi et al. US patent no. 6,735,392 392 in view of Chin et al. US patent no. 5,959,968 and further in view of Shanklin et al. US patent no. 6,578,147.

Regarding claim 7, as per claims above, Elahmadi and Chin disclose all the limitations except for a computer program arranged to control the transmission packet.

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Shanklin discloses the load balance software can be programmed so that only packets destined for a given range of IP addresses are copied to intrusion detection sensors (i.e. control the transmission of packet traffic) (col. 6, lines 29-56). Since use of software programming for controlling the optical signal transmission is well known in the art for redirecting the optical signal from a congested working path or an over load working path to the protection paths or alternate paths. It would have been obvious to an artisan at the time of the invention to include the teaching of Shanklin in the system of Elahmadi and Chin. One of ordinary skill in the art would have been motivated to do this in order to recovery operation performed of the optical system in case of a failure or break of the transmission path or traffic congestion on one path or at fault. Thus, it improves the reliable of the optical system and increase the capacity of the network.

Regarding claim 8, Shanklin further discloses a router or switch is processor-based and includes load balancing programming, which controls how packets are distributed from the internetworking device to the sensors for processing (col. 2, lines 54-58).

Conclusion

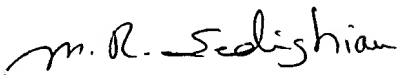
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DT
02/03/2005


M. R. SEDIGHIAN
PRIMARY EXAMINER